

IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF OREGON

NORTHWEST ENVIRONMENTAL
DEFENSE CENTER, WILDEARTH
GUARDIANS, and NATIVE FISH
SOCIETY,

No. 3:18-cv-00437-HZ

[DRAFT] ORDER

Plaintiffs,

v.

UNITED STATES ARMY CORPS OF
ENGINEERS and NATIONAL MARINE
FISHERIES SERVICE,

Defendants.

CITY OF SALEM and MARION COUNTY,

Intervenor-Defendants.

HERNÁNDEZ, District Judge:

Currently before the Court is Plaintiffs Northwest Environmental Defense Center, WildEarth Guardians, and Native Fish Society's Motion for Injunctive Relief. The Court GRANTS in part and DENIES in part Plaintiffs' requested relief.

FINDINGS OF FACT & CONCLUSIONS OF LAW

- (1) Upper Willamette River (“UWR”) Chinook salmon and UWR steelhead (collectively “listed salmonids”) were listed as “threatened” under the Endangered Species Act (“ESA”) in 1999. The salmonids’ status remains threatened; however, Defendant National Marine Fisheries Service (“NMFS”), the federal agency responsible for administration of the ESA with respect to the listed salmonids, has recently been considering downgrading their status to “endangered.” USACE 049439.
- (2) Defendant United States Army Corps of Engineers (“Corps”) operates the Willamette Valley Project (“WVP”), a large network of 13 federally owned dams and related facilities located in the Willamette River Basin.
- (3) In 2008, NMFS, in consultation with the Corps, issued a Biological Opinion (“BiOp”) analyzing the impacts the WVP has on the listed salmonids. NMFS found that “lack of passage is one of the single most significant adverse effects on both the fish and their habitat,” and “[w]ater quality problems are one of the major limiting factors in [downstream] habitat[.]” BiOp 9-33, 9-52, 9-61. NMFS set forth a suite of Reasonable and Prudent Alternatives (“RPAs”) necessary to avoid jeopardizing the existence and recovery of the listed salmonids and adversely impacting the salmonids’ habitat.
- (4) Under the relevant RPAs, the Corps is required to:
 - (a) Outplant adult salmonids above Green Peter Dam (South Santiam River) if deemed necessary by NMFS.
 - (b) By May 2011 and until permanent downstream passage facilities are constructed, carry out and study interim operational measures to pass juvenile

salmonids as safely and efficiently as possible downstream through WVP reservoirs and dams, including such measures as reservoir drawdowns, pulsing flow releases, use of non-turbine passage routes, and spill operations.

- (c) Beginning in 2008, conduct a deep drawdown at Fall Creek Reservoir (Middle Fork Willamette subbasin) to pass juvenile fish more safely through the regulating outlet.
- (d) Build and begin operating permanent downstream fish passage facilities at:
 - (i) Cougar Dam (McKenzie subbasin) by 2015;
 - (ii) Lookout Point and Dexter dams (Middle Fork Willamette subbasin) by March 2022; and
 - (iii) Detroit and Big Cliff dams (North Santiam subbasin) by March 2024.
- (e) Study and plan a fourth downstream passage facility that can be built and operated shortly after the BiOp's term ends in 2023.
- (f) Carry out and study interim water quality measures (operational and minor physical modifications) to achieve temperature control and reduce exceedances of total dissolved gas ("TDG") limits until permanent water quality control facilities can be constructed.
- (g) By March 2019, build and begin operating a water temperature control tower at Detroit Reservoir.
- (h) Develop and implement protocols to protect water quality during emergency and unusual events.

BiOp 9-33—36, 9-42, 9-48—58, and 9-61—9-67.

- (5) The Corps has not begun operating any of the permanent downstream passage structures required under the BiOp and will not meet any of the future deadlines for doing so; has essentially abandoned plans to build a facility at Lookout Point Dam; and has not begun studying or planning to construct the fourth fish passage facility discussed in the BiOp. Opinion & Order 13, ECF 112. Except for the annual deep drawdown at Fall Creek Reservoir, the Corps has not consistently carried out downstream fish passage measures in the WVP. *Id.* at 16-17.
- (6) The Corps has not constructed the water temperature control tower at Detroit Dam. *Id.* at 13-14. Water temperatures below Detroit, Green Peter, and Lookout Point dams continue to be too cold in summer and too warm in fall, and TDG exceedances repeatedly occur below Big Cliff Dam. Pl. Ex. 76 at 23-25, 32, 37-40, 67-70, ECF 118-14; Pl. Ex. 77 at 25-27, 34, 40-42, 69-72, ECF 118-15; Pl. Ex. 78 at 4, ECF 118-16.
- (7) As early as 2017, NMFS determined it was necessary and, as provided in the RPA, requested the Corps begin outplanting adult UWR Chinook salmon above Green Peter Dam; however, the Corps has not done so. Pl. Ex. 85, ECF 118-23.
- (8) Shortly after Plaintiffs filed this action, the Corps and NMFS reinitiated formal ESA consultation in April 2018. Initially, Defendants estimated that they would complete consultation and issue a new biological opinion in 2022; they now estimate they will finish consultation by the end of 2023. It took Defendants eight years to complete the 2008 BiOp.
- (9) The status of the species has continued to decline since the 2008 BiOp was issued, and the Corps' operation of the WVP is a cause of that decline. Opinion & Order 20-21, ECF

112; Fourth Schroeder Decl. ¶¶ 10, 12, 17-23, ECF 119; Fifth Schroeder Decl. ¶¶ 8-11, ECF 144.

- (10) As the Court concluded in its summary judgment ruling, Defendants are violating the ESA and Administrative Procedure Act (“APA”). Specifically, the Corps’ failure to carry out the fish-passage and water quality RPAs violates the substantive no-jeopardy requirement of ESA Section 7; the Corps’ operation of the WVP is causing “take” of juvenile salmonids in excess of the BiOp’s Incidental Take Statement (“ITS”) in violation of ESA Section 9; and Defendants’ multi-year delay in reinitiating ESA consultation violates the procedural requirements of ESA Section 7, as to the Corps, and the APA, as to NMFS. Opinion & Order 21, 30, 36.
- (11) Given the Corps’ operation of the WVP violates the ESA, this Court has jurisdiction to enforce the ESA’s mandates, 16 U.S.C. § 1540(g)(1), including through declaratory or injunctive relief. *Winter v. Nat. Res. Def. Council, Inc.*, 555 U.S. 7, 33 (2008).
- (12) To obtain the interim injunctive relief they seek, Plaintiffs must show: (1) they are likely to suffer irreparable harm in the absence of the requested relief; (2) remedies available at law, such as monetary damages, are inadequate to compensate for the plaintiff’s injury; (3) the balance of hardships between the plaintiff and defendant warrants a remedy in equity; and (4) the public interest would not be disserved by an injunction. *Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv.* (“*NWF VIII*”), 886 F.3d 803, 817 (9th Cir. 2018). Injunctive relief must be tailored to remedy the specific harm. *Melendres v. Arpaio*, 784 F.3d 1254, 1265 (9th Cir. 2015). “Nevertheless, the district court has broad discretion in fashioning a remedy.” *Id.*

- (13) Because the ESA “afford[s] first priority to the declared national policy of saving endangered species” and establishes that the value of endangered species is “incalculable,” *Tennessee Valley Auth. v. Hill*, 437 U.S. 153, 185, 187-88 (1978), “[t]he ESA removes the latter three factors in the four-factor injunctive relief test from [the court’s] equitable discretion.” *NWF VIII*, 886 F.3d at 817. The court must “presume that remedies at law are inadequate, that the balance of interests weighs in favor of protecting endangered species, and that the public interest would not be disserved by an injunction.” *Id.* (citation omitted).
- (14) Contrary to the Corps’ arguments, limited agency resources and impacts to power production, recreation, and local economies do not overcome the presumption that the balance of harms and public interest factors tip in Plaintiffs’ favor. *Nat’l Wildlife Fed’n v. Nat’l Marine Fisheries Serv.* (“*NWF VII*”), No. 3:01-CV-0640-SI, 2017 WL 1829588, at *6 (D. Or. Apr. 3, 2017). The Court concludes that Plaintiffs have established the latter three factors in the four-factor injunctive relief test.
- (15) The Corps has recently adopted interim fish passage and water quality measures that it plans to carry out during the reinitiated ESA-consultation process with NMFS. *See* ECF Nos. 130-1, 178-2. In formulating the interim measures, the Corps did not consider conducting deep drawdowns at Cougar or Lookout Point reservoirs on the basis that it does not have authority under the Flood Control Act of 1950 (“1950 FCA”), Pub. L. No. 81-516, § 204, 64 Stat. 163 (1950), and House Document 531 (“HD 531”) to draw the reservoirs below the “power pool” during the “critical power production period, October through March.” H.R. Doc. No. 81-531, App. J at 2054.

- (16) As will be explained more thoroughly in the Court’s final Opinion & Order on Plaintiffs’ request for injunctive relief, the Corps has broad discretion under the 1950 FCA and HD 531 to conduct operational measures that preclude hydropower generation for the benefit of the listed salmonids, so long as hydropower generation is not eliminated during the entirety of the power production period. Thus, interim operations such as deep drawdowns and using water in the “power pool” to meet water quality targets are consistent with the Corps’ statutory authority, whereas “run-of-river” operations that eliminate power production during the entirety of the “critical power production period” are not.
- (17) Consistent with the opinions of NMFS, Plaintiffs’ experts, and the Oregon Department of Fish and Wildlife, the Court finds that the Corps’ interim measures do not adequately address the lack of volitional fish passage and water quality issues in the WVP. *See, e.g.*, Pl. Exs. 63-64, 66, 70-75; Fifth Schroeder Decl.; Fourth Domingue Decl.
- (18) As evinced by the continuing decline of the listed species, lack of adequate fish passage and poor water quality due to the existence and operation of the dams cause substantial harm to the listed salmonids. In addition, Defendants’ failure to timely reinstitute ESA-consultation, which the Court adjudicated was a substantial procedural violation, has resulted in continuing harms to the listed species. The Court therefore finds that “continuation of the status quo could result in irreparable harm to [the] threatened species” absent interim measures that improve passage and water quality in the WVP. *NWF VIII*, 886 F.3d at 820. Because the Corps’ operation of the WVP threatens the continued existence and recovery of the listed salmonids, Plaintiffs’ members will suffer irreparable harm to their recreational and aesthetic interests in the listed salmonids. *Id.* at

822. Accordingly, Plaintiffs have established they are entitled to interim injunctive measures that will improve fish passage and water quality in the WVP. *See, e.g., id.* at 820-23; *Marbled Murrelet v. Babbitt*, 83 F.3d 1060, 1066 (9th Cir. 1996), *as amended on denial of reh'g* (June 26, 1996) (“A reasonably certain threat of imminent harm to a protected species is sufficient for issuance of an injunction under section 9 of the ESA.”); *Nat’l Wildlife Fed’n v. Burlington N. R.R.*, 23 F.3d 1508, 1512 n.8 (9th Cir. 1994) (“We are not saying that a threat of extinction to the species is required before an injunction may issue under the ESA. This would be contrary to the spirit of the statute, whose goal of preserving threatened and endangered species can also be achieved through incremental steps.”).

- (19) The evidence demonstrates that volitional fish passage is biologically necessary and spill operations and deep drawdown measures represent the most effective means for providing volitional passage under current dam configurations. Fourth Schroeder Decl. ¶¶ 38-39; Third Domingue Decl. ¶¶ 5, 11. At risk of oversimplification, the reasoning behind spill operations and deep drawdowns is relatively straightforward: Juvenile salmonids must pass through the dams to successfully outmigrate to the ocean; the fish typically navigate downstream by following the flow of the river;¹ slow-moving water in the large reservoirs behind the dams disrupts these natural outmigration cues, making it difficult for the fish to find their way downstream to the dam and lengthening their exposure to predators and pathogens in the reservoirs; increasing flow via drawdowns and spill operations reduces the size of the reservoir and accelerates the salmonids’

¹ “The smolts, apparently, prefer not to swim. They face upstream, open their mouths, and permit the current to carry them downstream.” *Idaho ex rel. Evans v. Oregon*, 462 U.S. 1017, 1020 n.1 (1983).

navigation to the dam, thereby decreasing their exposure to pathogens and predators; once the juvenile salmonids reach the dam they can only pass downstream via the powerhouse, regulating outlets (“ROs”), or spillways; for likely obvious reasons, significantly higher mortality occurs when fish pass through the power turbines versus the ROs or spillways; and, concerning drawdowns specifically, juvenile salmonids are surface-oriented fish, meaning they cannot sound very deep and are unlikely to find the ROs unless the reservoir surface elevation is drawn down within 20-25 feet of the outlet opening. Fourth Schroeder Decl. ¶¶ 38-39; Third Domingue Decl. ¶ 11; Pl. Ex. 19, at 76, ECF 36-19; Pl. Exs. 24, 29. Accordingly, the Court finds deep drawdowns and spill operations are necessary to avoid irreparable harm.

- (20) Plaintiffs’ request for a Technical Advisory Team to direct the Corps’ implementation of the interim injunctive operations is denied. *Armstrong v. Brown*, 768 F.3d 975, 987-88 (9th Cir. 2014) (a court may not delegate its Article III powers to an expert advisor but may retain an expert to monitor compliance and make recommendations to the court). Although the Corps often ignores the recommendations of the expert agencies and improperly prioritizes other project purposes over the needs of the listed salmonids, the Court has no basis to believe that the Corps will not follow the Court’s orders. At this juncture, the Court declines to order expert oversight of the Corps’ implementation of the interim measures because more narrowly tailored remedies are available to ensure the Corps complies with the mandates of the ESA during the reconsultation period.
- (21) For similar reasons, the Court will not order the Corps to exceed Oregon’s standards for TDG levels in violation of the Clean Water Act. Although there is some evidence that brief periods of elevated TDG levels up to 120-125% have a negligible effect on fish,

NWF VII, 2017 WL 1829588 at *7, a court may not issue an injunction requiring an agency to violate other statutory requirements. *San Luis & Delta-Mendota Water Auth. v. Jewell*, 747 F.3d 581, 645 n.49 (9th Cir. 2014). Nor will the Court order the Corps to seek a rule change allowing temporary TDG exceedances. The State of Oregon does not believe it necessary to change water quality standards, and this Court will not order a futile act. Amicus Reply Br. 4, ECF 140.

- (22) The Court also declines to grant Plaintiffs’ request for a December 2021 deadline for the Corps to complete the Cougar 2.0 study, request for the Corps to fund and implement general research needed for the new biological opinion, and request for the Corps to update to the 2012 Operational Measures Evaluation Team (“OMET”) Report. Those requests are not narrowly tailored to remedy the specific harms at issue in this case. The Cougar 2.0 study and Defendants’ record development during reinitiated ESA consultation are separate processes that are properly left to the agencies’ discretion. The sufficiency of the 2012 OMET Report was never challenged in this action.
- (23) Finally, it is clear that making changes to the Corps’ operation of the WVP necessitates consideration of biological tradeoffs, involve many complex and sometimes imprecise variables, require adaptive management in their implementation, and must be monitored to measure efficacy. Less clear is how the measures can be implemented in a comprehensive manner that balances the potential tradeoffs, accounts for the multifarious variables, and provides the most benefit to the listed salmonids. Thus far, the Court has been forced to glean NMFS’ expertise from the administrative record, as not one declaration from a NMFS-fish biologist has been submitted in this case. The Corps makes much-to-do about developing its interim measures in coordination with NMFS; however,

the measures were fashioned under the incorrect belief that the Corps lacks statutory authority to conduct deep drawdowns. Therefore, the Court finds it appropriate for the parties' technical experts to confer and flesh out the implementation details of numerous interim mitigation measures.²

INTERIM INJUNCTION

At this time, the Court is ordering Defendants to carry out specific interim measures that the Court finds do not require further clarification, as well as general directives that involve technical aspects requiring further input from the parties' experts. The expert panel that the Court envisions fleshing out the implementation details for the interim measures is comprised of Plaintiffs' experts, NMFS' fish biologists, and engineer(s) for the Corps that can advise on the dam-operations aspects of the interim measures. However, the Court is open to any suggestions the parties might have as to how the expert panel should be structured to best achieve the Court's desired outcome of comprehensive and implementable mitigation measures that can be incorporated into a final injunction. To be clear, this process will not devolve into a forum for further disagreement about the biological benefits of, or the Corps' authority to carry out, the interim measures. The Court has already determined that the Corps has discretionary authority and must provide volitional downstream fish passage and water quality mitigation measures to mitigate irreparable harm to the listed salmonids. Those issues are therefore beyond debate and need not be taken into consideration during the experts' deliberations. Simply put, the expert

² Upon completion of this iterative process, the Court will incorporate the Experts' proposed interim measures into a final injunction and accompanying opinion containing a more detailed analysis of the findings of fact and conclusions of law outlined in this Draft Order.

panel's task is to hammer out the details and propose an order containing the best means for effectuating the ends the Court has determined equity demands.

The Court also notes that the Corps' significant delay in carrying out the RPA measures has made it to where interim operational measures are the only presently available options to mitigate the fish passage and water quality issues existing in the WVP. Despite the requirements of the 2008 BiOp, the Corps has fought tooth and nail to resist implementing interim fish passage and water quality measures that it was supposed to begin implementing a decade ago, and that NMFS has been recommending for years. The Court is disheartened by the fact that, when compared to how the Corps should have proceeded had it complied with the BiOp, much of the injunctive relief that the Court is now ordering can be considered, in many respects, a giant leap backward. Consequently, the Court has no patience for further delay or obfuscation in this matter and expects nothing short of timely implementation of the injunctive measures and the experts' proposal outlining the parameters for those measures.

The Court ORDERS as follows:

- (1) Defendants SHALL complete reinitiated ESA-consultation and issue a new biological opinion by December 31, 2024.
- (2) The technical experts for the parties, including at least two of NMFS' fish biologists that are familiar with the WVP (hereinafter "Experts"), SHALL confer and submit to the Court on or before **INSERT DATE**³ a proposed order fleshing out the parameters of the

³ As set forth in the instant Minute Order, by August 10, 2021, the parties will email the Courtroom Deputy a joint submission of the deadline(s) for the Experts' implementation proposal. Given the short deadlines for some of the injunction measures, the parties may propose different deadlines for the Experts' implementation order on the near-term measures, e.g., deep drawdown at Cougar Dam, spill operations at Foster Dam, and a determination regarding use of the lower ROs at Detroit Dam by fall 2021, and the measures that will be implemented further

interim measures discussed throughout this Interim Injunction. The Experts' proposed measures must be in accordance with the best available science, technically feasible, incorporate principles of adaptive management, and provide meaningful research, monitoring, and evaluation ("RM&E") of the interim measures.

- (3) Until Defendants issue the new biological opinion, the Corps SHALL implement the interim injunction measures discussed in this Interim Injunction to the greatest extent practicable under existing hydrologic conditions and necessary flood control operations. In carrying out the interim measures, the Corps must make every effort to comply with the various water temperature, TDG, and instream-flow requirements governing the WVP.
- (4) The Corps SHALL fund and/or carry out RM&E to evaluate the effects of the interim measures on UWR Chinook salmon and UWR steelhead. The Experts will jointly propose specific RM&E to accompany the interim measures.
- (5) The Corps SHALL follow its established maintenance outage schedules and emergency protocols.
- (6) Defendants SHALL provide biannual status reports detailing their progress and compliance with the interim measures. The Experts will jointly propose deadlines for the status reports that allow for timely and meaningful dissemination of the following information: (1) the interim measures that have occurred at each dam; (2) any deviation

down the road. The Court encourages such an approach if doing so will make the Experts' task more manageable, so long as the proposed deadlines provide sufficient time for the Court to evaluate the Experts' proposed implementation order and for the Corps to begin implementing the interim measures ultimately adopted by the Court.

- from outage schedules, emergency protocols, and water quality standards; (3) all RM&E that was conducted during the prior six months and any available results of that research; (4) all RM&E planned for the next six months; and (5) any proposed changes to the interim measures based on changed circumstances or the results of RM&E.
- (7) Defendants SHALL post the results of all RM&E studies on a publicly accessible website.
- (8) Given the Corps' track record of not following through on past interim measures and repeatedly missing self-imposed deadlines, the Court finds it appropriate to incorporate into this Interim Injunction the Corps' Interim Measures that sufficiently mitigate irreparable harm. *See* ECF 130-1 (Interim Measures Implementation Plan), 178-2 (Refinements to Interim Measures). The Court therefore ADOPTS by reference and ORDERS the Corps to implement Interim Measure Nos. 5, 6, 7, and 20.
- (9) "Deep drawdown" measures must: (1) be performed during peak juvenile migration timing; (2) prioritize volitional fish passage; (3) draw down the reservoir elevation to within 25' or less of the regulating outlets; (4) prioritize use of the ROs during the drawdown, especially during the hours between sunset and sunrise; and (5) where applicable, not preclude the ability to produce hydropower for the entire duration of the October through March critical power production period.

North Santiam Subbasin

- (10) The Corps SHALL carry out fish passage and water quality operations at Detroit and Big Cliff reservoirs as detailed in the Corps' Interim Measure Nos. 5-7.

- a. Expert Assignment: Consider and report whether the interim operation should be modified to incorporate use of the lower regulating outlets at Detroit Dam for temperature control purposes beginning 2021.
- b. Expert Assignment: Determine whether operational measures alone are sufficient to maintain acceptable TDG levels below Big Cliff Dam and, if not, propose a reasonable timeline for designing and constructing a structural solution for mitigating excess TDG levels during spill operations.

South Santiam Subbasin

- (11) Within one year of this Interim Injunction, the Corps SHALL begin outplanting adult UWR Chinook salmon above Green Peter Dam.
 - a. Expert Assignment: Create an outplanting plan, including any improvements and/or development of adult release sites necessary to accomplish adult outplanting.
- (12) After adult outplanting above Green Peter Dam begins, the Corps SHALL carry out juvenile downstream passage measures at Green Peter Dam.
 - a. Expert Assignment: To ensure timely implementation of the downstream passage measures at Green Peter Dam, propose spring and fall passage operations that prioritize volitional fish passage past the dam through non-turbine routes.
- (13) Beginning fall 2021, the Corps SHALL carry out spring and fall spill operations at Foster Dam.
 - a. Expert Assignment: Consider and propose measures specifying the dates, hours, and amount of turbine use for the Foster spill operations that will provide the most benefit

to the listed salmonids as a whole. The Experts will also consider and make a recommendation on whether delayed spring refill should be implemented.

McKenzie Subbasin

- (14) Beginning fall 2021, the Corps SHALL conduct a deep drawdown at Cougar Dam.
 - a. Expert Assignment: Create a plan for conducting a deep drawdown at Cougar Reservoir that can be implemented beginning fall 2021.
- (15) Beginning in 2022, the Corps SHALL conduct spring passage measures at Cougar Dam.
 - a. Expert Assignment: Consider spring passage at Cougar Dam, including delayed refill measures, and propose operational measures that prioritize volitional downstream fish passage via non-turbine routes.
 - b. Expert Assignment: Consider and make a recommendation on whether structural improvements/modifications need to be made to Cougar Dam's regulating outlets to ensure safer fish passage and reduce TDG levels.

Middle Fork Willamette Subbasin

- (16) In coordination with the Experts, the Corps SHALL conduct an analysis to determine the degree of landslide risk associated with implementing a fall deep drawdown at Lookout Point Reservoir. The deep drawdown(s) studied in the analysis must prioritize volitional fish passage through Lookout Point Dam using non-turbine routes and must include any corresponding operational changes required to provide fish passage at Dexter Dam. Absent a showing of undue hardship, the proposed landslide-risk analysis must be completed in time to allow for a determination of whether a deep drawdown will be implemented at Lookout Point Dam beginning fall 2022.

- (17) Beginning 2022, the Corps SHALL conduct spring spill operations at Lookout Point Dam and Dexter Dam.
- a. Expert Assignment: Propose a Lookout Point/Dexter spring spill measure specifying what elevation at Lookout Point Reservoir the Corps will begin spill operations to provide the most benefit to the salmonids. The proposal must prioritize use of the spillway to the maximum extent practicable and turbine use should be limited to only the amount necessary to manage water temperatures and TDG levels. The Experts must also determine whether, in addition to the Corps' plan of splitting water between the spillway and powerhouse detailed in Interim Measure No. 21 (ECF 178-2), Lookout Point Dam's regulating outlets should also be utilized for temperature control in the late summer and early fall.
- (18) As required by RPA 4.6, the Corps SHALL make improvements to and begin operating the Dexter adult fish facility within two years of this Interim Injunction.
- (19) Beginning in 2021, the Corps SHALL conduct the annual Fall Creek Reservoir deep drawdown operation similar to prior years but extend the dates from December 1 through January 15. The Corps must monitor for erosion to the earthen embankment that could occasion the extended drawdown and may suspend the drawdown for dam safety reasons. The Corps must notify the Court within three days of the suspension.
- (20) Beginning in 2022, the Corps SHALL conduct winter and spring downstream passage operations at Fall Creek Dam.
- a. Expert Assignment: Propose passage measures prioritizing volitional passage over trap-and-haul operations if hydrologic conditions allow and downstream water quality requirements can be met.

CONCLUSION

Plaintiffs' Motion for Injunctive Relief [118] is GRANTED in part and DENIED in part.

IT IS SO ORDERED.

DATED:_____.

MARCO A. HERNÁNDEZ
United States District Judge